<center>REMARKS</center>

The specification has been amended on pages 13 and 14 to correct typographical errors in Equations 13-15. In particular, Equation 13 has been amended to correct a typographical error to reflect that w_{RC} is dependent on $\bullet_R$ and not $\bullet_L$. It is respectfully submitted that this mistake and its correction is clear and unambiguous to the skilled person in view of Equation 12 and the symmetry between the left and right channels. Also, Equations 14 and 15 have been amended to refer to the received two signals R_{out} and L_{out} rather than to the left and right signals R and L which are generated by Equation 11. It is respectfully submitted that this mistake and its correction is clear and unambiguous to the skilled person as the equations are clearly used to generate the output signals L, R based on the input signals R_{out} and L_{out}.

The claims have been amended to more clearly define the invention as disclosed in the written description. In particular, claim 21 has been cancelled, while claim 20 has been amended to clearly claim a computer-readable medium have stored thereon encoded data content.

In addition to the above, the independent encoder claims 1 and 11 have been clarified to reflect that the parametric data comprises at least one parameter describing a power of a central channel signal with respect to a power of a right channel signal and a left channel signal for a two channel downmix of the central

channel signal, the right channel signal and the left channel
signal; the at least one parameter being substantially given by:

$$IID_C = 10\log10\left(\frac{\varepsilon^2 \sum_k C[k]C^*[k]}{\sum_k L[k]L^*[k] + \sum_k R[k]R^*[k]}\right)$$

where C[k] denotes sample k of the central channel signal C; R[k]
denotes sample k of the right signal R, L[k] denotes sample k of
the left signal C and • denotes a weight determining a strength of
the central signal in the two channel downmix.

Support for the above may be found in Equation 10 of the
description and in the surrounding text on page 12 lines 6 to 23.

In addition, the decoder claim 22 has been amended to be a
proper independent claim, and to clarify that the decoder generates
left, right and center channels using the equation:

$$\begin{bmatrix} L[k] \\ R[k] \\ C[k] \end{bmatrix} = \begin{bmatrix} w_L L_{out} \\ w_R R_{out} \\ w_{LC} L_{out} + w_{RC} R_{out} \end{bmatrix}$$

where L_{out} is a left channel of the M channels, R_{out} is a right
channel of the M channels and w_{LC} and w_{RC} depend on an interchannel
level parameter of the parametric data.

Support for the above may be found in the Application as a
whole and, in particular, on page 8, lines 1-2, page 12, lines 17-

18 and Equation 10. It is noted that although the application includes some exemplary equations for determining the weights w_{LC} and w_{RC} as a function of the IID interchannel level parameter of Equation 10, it will be clear to the skilled person that these are merely exemplary and that in other embodiments, other specific equations may be used (as, e.g., suggested by page 8, lines 1-2 which indicates that other power ratios than that of Equation 10 may be included in the parametric data and thus may be used by the decoder).

The Examiner has rejected claims 1-3, 6, 9-13, 16, 19-22 and 25 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 7,447,317 to Herre et al. The Examiner has further rejected claims 4, 5, 14 and 15 under 35 U.S.C. 103(a as being unpatentable over Herre et al. in view of U.S. Patent Application Publication No. 2004/0028244A1 to Tsushima et al. In addition, the Examiner has rejected claim 7 under 35 U.S.C. 103(a) as being unpatentable over Herre et al. in view of U.S. Patent 5,857,026 to Scheiber. Furthermore, the Examiner has rejected claim 17 under 35 U.S.C. 103(a) as being unpatentable over Herre et al. in view of U.S. Patent Application Publication No. 2003/0035553A1 to Baumgarte et al. Moreover, the Examiner has rejected claim 23 under 35 U.S.C. 103(a) as being unpatentable over Herre et al. The Examiner has also rejected claims 8 and 18 under 35 U.S.C. 103(a) as being unpatentable over Herre et al. in view of U.S. Patent 5,982,903 to Kinoshita et al. Finally, the Examiner has rejected claim 24 under 35 U.S.C. 103(a) as being unpatentable over Herre et al. in view of

Official Notice as evidenced by U.S. Patent Application Publication No. 2008/0195397A1.

The Herre et al. patent discloses compatible multi-channel coding//decoding by weighting the downmix channel.

As noted in MPEP §2131, it is well-founded that "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California,* 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Further, "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.,* 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Applicants submit that while Herre et al. discloses, in general, a multi-channel encoder having a down-mixer and an analyzer for processing the input signals and for generating parameter data, Here et al. does not disclose or suggest the parametric data as specifically set forth in claims 1 and 11. In particular, claims 1 and 11 include the limitation "the parametric data comprises at least one parameter describing a power of a central channel signal with respect to a power of a right channel signal and a left channel signal for a two channel downmix of the central channel signal, the right channel signal and the left channel signal, the at least one parameter being substantially given by:

$$IID_C = 10 \log 10 \left(\frac{\varepsilon^2 \sum_k C[k] C^*[k]}{\sum_k L[k] L^*[k] + \sum_k R[k] R^*[k]} \right)$$

where C[k] denotes sample k of the central channel signal C; R[k] denotes sample k of the right signal R, L[k] denotes sample k of the left signal C and ε denotes a weight determining a strength of the central signal in the two channel downmix." Applicants submit that Herre et al. neither discloses nor suggest such parametric data.

Claim 22 claims a decoder for decoding encoded output data. Applicants submit that Herre et al. merely discloses the generic concept of using parametric data to upmix a stereo signal. Thus, it is respectfully submitted that Herre et al. neither discloses nor suggests any specific upmix operation whatsoever. It follows that Herre et al. clearly cannot, and does not, disclose Applicants' very specific approach for generating a right, left and center channel.

Thus, it is respectfully submitted that none of the cited prior art document discloses a decoder generating left, right and center channels using the equation:

$$\begin{bmatrix} L[k] \\ R[k] \\ C[k] \end{bmatrix} = \begin{bmatrix} w_L L_{out} \\ w_R R_{out} \\ w_{LC} L_{out} + w_{RC} R_{out} \end{bmatrix}$$

where L_{out} is a left channel of the M channels, R_{out} is a right channel of the M channels, and w_{LC} and w_{RC} depend on an interchannel level parameter of the parametric data, as specifically set forth in claim 22.

The described and claimed approach provides a particularly advantageous upmixing from a right and left channel downmix to right, left and center channels. A low complexity is achieved while allowing the downmix to be backwards compatibility. Furthermore, the specific upmixing results in a high quality of the resulting multichannel signal.

Accordingly, it is respectfully submitted that independent claim 22 (along with independent claims 1 and 11) is novel and inventive over the cited prior art.

Further, since claims 2-10, 12-20 and 23-25 all depend from one of claims 1, 11 and 22, Applicants believe are also novel and inventive over the cited prior art.

Applicants believe that this application, containing claims 1-20 and 22-25, is now in condition for allowance and such action is respectfully requested.

Respectfully submitted,

by___/Edward W. Goodman/_____
Edward W. Goodman, Reg. 28,613
Attorney
Tel.: 914-333-9611